# RECEIVED CENTRAL FAX CENTER NOV 0 7 2006

AMENDMENT
Patent Application Serial No. 10/829,514
Reply to Office Action of May 9, 2006

Attorney Docket No.: Case 7028

#### Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

- 1. (currently amended): An Apparatus apparatus for bending a tube in a tube bend plane, comprising: a sleeve for receiving the tube therein a bend die mounted for rotation about a bending axis a clamp die directed toward the bend die for clamping the sleeve to the bend die, the sleeve having an inner surface engaged by the bend die, and an outer surface engaged by the clamp die, and a first longitudinal slit located between the inner surface and the outer surface parallel to the tube bend plane, the clamp die holding the sleeve to be bent as the bend die and clamp dies rotate about the bending axis a pressure die engaged with the outer surface of the sleeve for restraining a portion of the sleeve spaced away from the bend to be formed in the tube; and means for rotating the bend die and clamp die to bend the sleeve and tube about the bend die.
- 2. (canceled)
- 3. (currently amended): The apparatus of claim 2 1, wherein the sleeve has a second longitudinal slit located between the inner surface and the outer surface parallel to the tube bend plane.
- 4. (previously presented): The apparatus of claim 1, wherein the sleeve comprises carbon steel
- 5. (currently amended): A method for bending a tube, the tube having an outer diameter

Attorney Docket No.: Case 7028

AMENDMENT
Patent Application Serial No. 10/829,514
Reply to Office Action of May 9, 2006

and the bend defining a tube bend plane, comprising: inserting the tube into an external sleeve, the external sleeve having an inner surface, and an outer surface, and a first longitudinal slit located parallel to the tube bend plane between the inner surface and the outer surface of the sleeve; engaging the inner surface of the sleeve with a bend die mounted for rotation about a bending axis; engaging the outer surface of the sleeve with a clamp die for clamping the sleeve and a tube to the bend die; directing a pressure die against the outer surface of the sleeve adjacent the clamp die; and rotating the clamp die and the bend die to bend the sleeve and tube around the bend

### 6. (canceled)

die.

- 7. (currently amended): The method of claim 6 5, wherein the sleeve has a second longitudinal slit located parallel to the tube bend plane between the inner surface and the outer surface of the sleeve opposite the first longitudinal slit.
- 8. (previously presented): The method of claim 5, wherein the sleeve is made of carbon steel.
- 9. (previously presented): The method of claim 5, wherein the tube is bent to a bend radius between about 1 to about 2 times the tube outer diameter.
- 10. (previously presented): The method of claim 5, wherein the tube has a tube wall thickness less than about 10% of the diameter of the tube.
- 11, (previously presented): The method of claim 10, wherein the tube is bent to a bend

# AMENDMENT Patent Application Serial No. 10/829,514 Reply to Office Action of May 9, 2006

Attorney Docket No.: Case 7028

radius between about 1 to about 2 times the tube outer diameter.

- 12. (previously presented): The method of claim 5, wherein the tube has a tube wall thickness of about 0.095"-0.250."
- 13. (currently amended): The method of claim 12, wherein the tube is bent to a bend radius between about 1 to about 2 times the tube outer diameter.
- 14. (previously presented): A method for bending a tube into a tight radius bend, the tube having a tube wall thickness less than about 10% of the tube outer diameter, the bend defining a tube bend plane, comprising: inserting the tube into an external sleeve, the sleeve having an inner surface and an outer surface and a first longitudinal slit located parallel to the tube bend plane between the inner surface and the outer surface; engaging the inner surface of the sleeve with a bend die mounted for rotation about a bending axis; engaging the outer surface of the sleeve with a clamp die for clamping the tube to the bend die; directing a pressure die against the outer surface of the sleeve adjacent the clamp die; and rotating the clamp die and the bend die to bend the tube and sleeve around the bend die.
- 15. (currently amended): The method of claim 14, wherein the tube is bent to a bend radius between about 1 to about 2 times the tube outer diameter.
- 16. (previously presented): The method of claim 15, wherein the sleeve has a second longitudinal slit located parallel to the tube bend plane between the inner surface and the outer surface opposite the first longitudinal slit.